

(FILE 'HOME' ENTERED AT 16:57:44 ON 09 JUL 1997)

FILE 'BIOSIS, CA, MEDLINE' ENTERED AT 16:58:04 ON 09 JUL 1997

L1 2 FILE BIOSIS  
L2 2 FILE CA  
L3 0 FILE MEDLINE

TOTAL FOR ALL FILES

L4 4 EGGSHELL# (5A) CRUSH?  
L5 3 FILE BIOSIS  
L6 5 FILE CA  
L7 0 FILE MEDLINE

TOTAL FOR ALL FILES

L8 8 EGGSHELL# (5A) (MILL? OR GRIND? OR GROUND)  
L9 7 DUPLICATE REMOVE L8 (1 DUPLICATE REMOVED)  
L10 0 FILE BIOSIS  
L11 0 FILE CA  
L12 0 FILE MEDLINE

TOTAL FOR ALL FILES

L13 0 PUTAMEN OVI  
L14 4535 FILE BIOSIS  
L15 2923 FILE CA  
L16 4973 FILE MEDLINE

TOTAL FOR ALL FILES

L17 12431 PUTAMEN

FILE 'WPIDS' ENTERED AT 17:04:26 ON 09 JUL 1997

L18 6 L4  
L19 6 L8

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L18 ANSWER 1 OF 6 WPIDS COPYRIGHT 1997 DERWENT INFORMATION LTD  
AN 96-366170 [37] WPIDS  
DNN N96-308467 DNC C96-115431  
TI \*\*\*Eggshell\*\*\* membrane sepg. device - comprises \*\*\*crusher\*\*\*  
which operates in water flow, and liq. cyclone to separate shells  
and membranes by specific gravity difference.  
DC D22 J01 P34 P41  
PA (QPPP) QP CORP  
CYC 1  
PI JP 08173838 A 960709 (9637)\* 7 pp  
ADT JP 08173838 A JP 95-178653 950714  
PRAI JP 94-260497 941025  
AB JP08173838 A UPAB: 960918  
Eggshell and membrane sepg. device comprises (a) a \*\*\*crushing\*\*\*  
device (3) to \*\*\*crush\*\*\* an \*\*\*eggshell\*\*\* with an  
\*\*\*eggshell\*\*\* membrane in a water flow for conveyance and (b) a  
liq. cyclone (9) to receive the \*\*\*crushed\*\*\* \*\*\*eggshell\*\*\*  
, \*\*\*eggshell\*\*\* membrane and water for transfer, and separate  
the eggshell and the eggshell membrane from each other by utilising  
specific gravity differences.  
ADVANTAGE - Eggshell and membrane are sepd. from each other  
with high efficiency.  
Dwg.1/7

L19 ANSWER 1 OF 6 WPIDS COPYRIGHT 1997 DERWENT INFORMATION LTD

AN 96-268245 [27] WPIDS

DNC C96-085171

TI Milk prods. contg. finely \*\*\*ground\*\*\* \*\*\*eggshell\*\*\* -  
having good taste in a calcium fortified foodstuff.

DC D13

IN GLAS, C; SCHAAFSMA, A

PA (FRIE-N) FRIESLAND BRANDS BV

CYC 68

PI WO 9615678 A1 960530 (9627)\* EN 17 pp

RW: AT BE CH DE DK ES FR GB GR IE IT KE LS LU MC MW NL OA PT SD  
SE SZ UG

W: AL AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU  
IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO  
NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG US UZ VN

NL 9401958 A 960701 (9631) 13 pp

AU 9539380 A 960617 (9638)

ZA 9509881 A 961030 (9649) 14 pp

ADT WO 9615678 A1 WO 95-NL396 951121; NL 9401958 A NL 94-1958 941123; AU  
9539380 A AU 95-39380 951121; ZA 9509881 A ZA 95-9881 951121

FDT AU 9539380 A Based on WO 9615678

PRAI NL 94-1958 941123

AB WO 9615678 A UPAB: 960710

Foods based on milk prods. are supplemented with aseptically obtd.  
and/or sterilised or low-germ fine \*\*\*ground\*\*\* \*\*\*eggshell\*\*\*

USE - Prods. are fortified and have good taste.

Dwg.0/0

L9 ANSWER 7 OF 7 CA COPYRIGHT 1997 ACS  
AN 74:103024 CA  
TI Use of eggshell compositions for promoting wound healing  
IN Balassa, Leslie L.  
SO U.S., 3 pp.  
CODEN: USXXAM  
PI US 3558771 710126  
AI US 680212  
DT Patent  
LA English  
AB Finely \*\*\*ground\*\*\* (40-70 .mu. particle size) \*\*\*eggshells\*\*\* are effective in the title use whether or not membrane is present. Application methods are the same as those given for animal membrane preps. in U.S. 3,400,199 (CA 69: 99397u) .

L19 ANSWER 6 OF 6 WPIDS COPYRIGHT 1997 DERWENT INFORMATION LTD

AN 72-01195T [01] WPIDS

TI Wound accelerator - contg eggshells and citric or phosphoric acid  
opt with magnesium and calcium salts and chitin.

DC B05 B06

PA (LESC-N) LESCARDEN LTD

CYC 1

PI US 3624201 A (7201)\*

PRAI US 68-704540 680212

AB US 3624201 A UPAB: 930000

Process for the acceleration of wound-heating in humans and other mammals comprises the topical or parenteral administration of a therapeutically effective dose of a finely-divided reaction product prep'd. by \*\*\*grinding\*\*\* \*\*\*eggshells\*\*\* contg. CaCO<sub>3</sub> with citric or phosphoric acid to produce the Ca salt of the acid so that the reaction product, when administered, contains no unreacted acid.

L9 ANSWER 5 OF 7 CA COPYRIGHT 1997 ACS  
AN 98:103492 CA  
TI Egg shell as a carrier for enzyme immobilization  
AU Makkar, H. P. S.; Sharma, O. P.  
CS Biochem. Lab., Indian Vet. Res. Inst., Palampur, 176 061, India  
SO Biotechnol. Bioeng. (1983), 25(2), 595-7  
CODEN: BIBIAU; ISSN: 0006-3592  
DT Journal  
LA English  
AB Enzyme immobilization on egg shell carrier was investigated. Thus, \*\*\*ground\*\*\* \*\*\*eggshell\*\*\* (0.5 g of 100 mesh) was added to 12 mL of a  $\beta$ -galactosidase soln. (protein 0.4 mg/mL) and stirred for 15 min. Glutaraldehyde (25%) was slowly added with stirring to bring to a final concn. of 2.0%. The mixt. was allowed to stand for 30 min at 4.degree., then bound enzyme was sepd. by centrifugation and washed with phosphate buffer. The immobilized enzyme had pH and temp. optimums of 6.5 and 45.degree., resp., and was stable for 2 days at 4.degree..

L19 ANSWER 2 OF 6 WPIDS COPYRIGHT 1997 DERWENT INFORMATION LTD  
AN 93-150083 [18] WPIDS

DNC C93-067166

TI Prodn. of fodder additive for egg-laying hens - from poultry-farm waste, by washing, milling, sterilising, and mixing with alumino-silicate components.

DC D13

IN KUZNETSOV, A F; LAVRENTEV, V A; MUKHINA, N V

PA (LENE-R) LENGD NEVSKAYA POULTRY WKS; (LEVE) LENGD VETERINARY INST

CYC 1

PI SU 1732907 A1 920515 (9318)\* 8 pp

ADT SU 1732907 A1 SU 90-4812293 900226

PRAI SU 90-4812293 900226

AB SU 1732907 A UPAB: 931112

The method comprises prodn. of food additive on basis of poultry farm waste (low grade meat, intestines, ovaries, ovarian ducts, heads, entrails, lungs, kidneys, trachea, stomachs, blood, down, downgrade egg waste, chicken embryos, \*\*\*eggshells\*\*\*, etc.). The waste is washed, \*\*\*milled\*\*\*, sterilised and mixed at final stages of drying (15-20 min before unloading) with aluminosilicates in form of zeolite, vermiculite, kieselguhr or perlite, in amt. 20-50% per wt. of starting waste.

Addn. of aluminosilicates results in stabilisation of fat components of additive, reduces its acid No. directly after prepn. and on storage, ensures uniform distribution of active substances within the mass of additive and reduces caking tendency of additive during storage. Obtd. additive is fed to chicks and hens in amt. 5-10% per wt. of standard feed.

USE/ADVANTAGE - Used in fodder industry for prodn. of feed additive for chicken and egg-laying hens. The additive improves quality of chicken feed, survival rate, egg-laying efficiency and strength of egg-shells. Bul. 18/15.5.92

Dwg. 0/0

L19 ANSWER 3 OF 6 WPIDS COPYRIGHT 1997 DERWENT INFORMATION LTD

AN 92-132525 [17] WPIDS

DNN N92-098881 DNC C92-062002

TI Calcium addn. to cooking salt - in form of \*\*\*ground\*\*\*  
\*\*\*eggshell\*\*\* flour, for improved nutritional value.

DC D13

IN SAMARTANO, M L

PA (SAMA-I) SAMARTANO M L

CYC 1

PI BR 9004780 A 920324 (9217)\*

ADT BR 9004780 A BR 90-4780 900919

PRAI BR 90-4780 900919

AB BR 9004780 A UPAB: 931006

Nutritional value of compsn. is increased by addn. of calcium in the  
form of eggshell flour, made by washing, drying and baking the  
shells, then milling into flour. (8/9)

8/9

L19 ANSWER 4 OF 6 WPIDS COPYRIGHT 1997 DERWENT INFORMATION LTD

AN 88-004848 [01] WPIDS

DNC C88-002404

TI Cosmetic material contg. powdered egg-shell - has good absorptivity for oils and moisture.

DC D21

PA (SHIS) SHISEIDO CO LTD

CYC 1

PI JP 62270511 A 871124 (8801)\* 5 pp

ADT JP 62270511 A JP 86-115037 860520

PRAI JP 86-115037 860520

AB JP62270511 A UPAB: 930923

Cosmetic material is prep'd. by blending powdered eggshell.

Typically, the powder is obtd. by \*\*\*grinding\*\*\*

\*\*\*eggshells\*\*\* of fowls, quails, etc. pref. to a grain size of 0.001-1,000 (sic) using an atomiser, etc.

ADVANTAGE - Cosmetic material has high absorptivity for moisture and oils.

0/0

SWER 5 OF 6 WPIDS COPYRIGHT 1997 DERWENT INFORMATION LTD

AN 77-36815Y [21] WPIDS

TI Plastic food container cleaning compsn. - comprises press. spray  
contg. alkali, insol. material and surfactant.

DC D14

PA (PYRN) PYRENE CHEM SERVICE

CYC 1

PI GB 1474389 A 770525 (7721)\*

PRAI GB 73-28785 730618

AB GB 1474389 A UPAB: 930901

Contaminated surfaces are cleaned by forcibly spraying an alkaline suspension (pH pref.  $\geq 8$ ) contg. e.g. 0.01-5, (pref. 1) wt.% of finely divided insol. material (I), e.g.  $\leq 3$  wt. % of a sol. surfactant (II) and e.g.  $\leq 5$  wt. % sol. alkali (III) e.g. alkali metal silicate or phosphate.

The compsn. is pref. made by diluting in water to give a dissolved and undissolved total solids content of 1-13 wt.%, a dry mixt. of 5-75 wt.% (I), 0.5-20 wt.% (II) and 5-75 wt.% (III).

The free rinsing compsn. is esp. useful for cleaning plastic food transport containers. In an example, a dry concentrate contd. 0.5 pbw Na metasilicate, 0.4 pbw Na<sub>3</sub>PO<sub>4</sub>, 0.6 pbw Na<sub>2</sub>CO<sub>3</sub>, 0.25 pbw K. oleic acid sulphonate, 0.1 pbw hydroxyethyl cellulose and 1 pbw \*\*\*ground\*\*\*      \*\*\*eggshells\*\*\* .

L18 ANSWER 2 OF 6 WPIDS COPYRIGHT 1997 DERWENT INFORMATION LTD  
AN 93-330532 [42] WPIDS  
CR 83-767559 [38]  
DNC C93-145978  
TI Quality improver for noodles - comprises eggshells composed of calcium carbonate.  
DC D13  
PA (QPPP) QP CORP  
CYC 1  
PI JP 05236893 A 930917 (9342)\* 3 pp  
JP 06085697 B2 941102 (9442)  
ADT JP 05236893 A Div ex JP 82-14895 820203, JP 90-402272 820203; JP 06085697 B2 Div ex JP 82-14895 820203, JP 90-402272 820203  
FDT JP 06085697 B2 Based on JP 05236893  
PRAI JP 82-14895 820203; JP 90-402272 820203  
AB JP05236893 A UPAB: 931202  
The quality improver for noodles comprises \*\*\*crushed\*\*\*  
\*\*\*eggshells\*\*\* composed of CaCO<sub>3</sub>.  
USE - For obtaining healthy and inexpensive quality improver for noodles which can be subst. for a phosphate or propylene glycol.  
Dwg. 0/0

L18 ANSWER 3 OF 6 WPIDS COPYRIGHT 1997 DERWENT INFORMATION LTD

AN 90-310105 [41] WPIDS

DNC C90-134115

TI Purification of natural calcium material - comprises pulverising e.g. egg-shell and treating with e.g. halorite in alkaline soln. to remove protein impurities.

DC B06 D13 E33

PA (ZENN-I) ZENNO H

CYC 1

PI JP 02221117 A 900904 (9041)\*

JP 08018829 B2 960228 (9613) 3 pp

ADT JP 02221117 A JP 89-41298 890220; JP 08018829 B2 JP 89-41298 890220

FDT JP 08018829 B2 Based on JP 02221117

PRAI JP 89-41298 890220

AB JP02221117 A UPAB: 930928

Natural Ca material is purified by pulverising or \*\*\*crushing\*\*\* \*\*\*eggshell\*\*\*, animal bone, shell or carapace if necessary, and treating with halorite, halorite, perhalorite, halogen dioxides, chloramines, isocyanuric halogenide, halogenated hydantoins, peroxide, peracids or permanganate aq. soln. in alkaline aq. soln., alkaline halorite or neutral, alkaline or weak acidity.

USE/ADVANTAGE - Protein impurities can be removed completely, to give white material. Also there is a little discolouration. No toxic gas gas producing agent is used, danger is a little, it is suitable for industrial proceeding.

In an example, 100 ml of 5% NaOH aq. soln., 10 g of H<sub>2</sub>O washed and air dried eggshells were added and warmed at 95-98 deg C for 2 hrs. with stirring sometimes. Soln. light yellow. After cooling, sedimented eggshells were filtered, washed with H<sub>2</sub>O, and air-dried. Original colour of eggshell was not charged, but not shell membrane was observed. A small amt. of white foreign matters were floated in soln., but can be removed completely by H<sub>2</sub>O washing.

0/0

L18 ANSWER 4 OF 6 WPIDS COPYRIGHT 1997 DERWENT INFORMATION LTD  
AN 88-311493 [44] WPIDS  
DNC C88-137684  
TI Flocculant for water purificn. - comprises micro powder of calcium carbonate or crushed rock.  
DC D15  
PA (HOND-I) HONDA S  
CYC 1  
PI JP 63229111 A 880926 (8844)\* 5 pp  
ADT JP 63229111 A JP 87-136392 870530  
PRAI JP 86-239653 861008; JP 87-136392 870530  
AB JP63229111 A UPAB: 930923

The flocculant consists of micro powder of calcium carbonate or crushed rock powder having 0.05 - 0.001 mmtheta particle dia..

The calcium carbonate is e.g. \*\*\*eggshell\*\*\* of chicken. The \*\*\*crushed\*\*\* rock is e.g. granite, basalt. Calcium carbonate or crushed rock is pref. shattered with a mill to 0.05 - 0.001 mmtheta powder. Addition of little water brings smooth operation. Waste water is passed through a screen to remove waste solid. The flocculant is added to the filtrated waste water to adsorb and to filtrate micro dust in the waste water.

USE/ADVANTAGE - The flocculant has adsorptive flocculation effect and filtration effect of waste material in waste water. The flocculant is harmless to dispose, because it is not a chemical product, and has economical cost.

0/3

L18 ANSWER 5 OF 6 WPIDS COPYRIGHT 1997 DERWENT INFORMATION LTD

AN 84-229077 [37] WPIDS

DNC C84-096805

TI Calcium prepn. for oral medicinal use - comprising finely crushed dried egg shells.

DC B04

PA (ONOD-I) ONODA M

CYC 1

PI JP 59137415 A 840807 (8437)\* 3 pp

ADT JP 59137415 A JP 83-9757 830124

PRAI JP 83-9757 830124

AB JP59137415 A UPAB: 930925

Preps. are obtd. by finely \*\*\*crushing\*\*\* dried \*\*\*eggshells\*\*\* and formulating into oral preps..

Suitably fresh eggshells as raw material after elimination of yolk and albumen was washed well with water or warm water and dried at temps. below 80 deg.C (at higher temps.. the live phage dies, and calcium and other minerals are denatured). The dry eggshells are placed in a pulveriser and pulverised at 3600 rpm for 12 mins. at a temp. lower than 80 deg.C. The pulverised eggshell is shifted through a 300 mesh sieve, by which 85% powder is passed, the remaining 15% shell is further pulverised.

USE/ADVANTAGE - Eggshell contains 95.4% CaCO<sub>3</sub>, 1.5% MgCO<sub>3</sub>, 0.18% H<sub>2</sub>PO<sub>4</sub> and 3.3% proteins as well as live lambda-phage contg. DNA, which can be utilised as mineral source. Moreover eggshell changes acidic constitution in man into slightly alkaline condition.

0/0

ANSWER 6 OF 6 WPIDS COPYRIGHT 1997 DERWENT INFORMATION LTD

AN 84-110170 [18] WPIDS

DNN N84-081532 DNC C84-046579

TI Processing egg-shells to separate residual adhering egg white etc. - involves drying before or after crushing and subjecting to air sepn..

DC C03 C04 D13 P43

PA (QPPP) QP CORP

CYC 1

PI JP 59049878 A 840322 (8418)\* 5 pp

ADT JP 59049878 A JP 82-161394 820916

PRAI JP 82-161394 820916

AB JP59049878 A UPAB: 930925

Eggshells obtained by separating egg liq. from eggs which have been cracked are dried after or before \*\*\*crushing\*\*\*, and separated into \*\*\*eggshell\*\*\* film portion and outer shell portion through air sepn.. The outer shell portion obtained includes less than 10% of the eggshell film which was present initially on the \*\*\*eggshells\*\*\*. The outer shell portion is \*\*\*crushed\*\*\* to use as livestock feed, fertiliser, or clarifier.

By this method, powder of eggshell may be provided without the necessity for washing which is required in the conventional methods to prevent occurrence of smell due to eggshell film. Further, the egg shell film can be used in removing heavy metals.

0/0

L9 ANSWER 2 OF 7 CA COPYRIGHT 1997 ACS  
AN 119:15151 CA  
TI Bicarbonate-based dentifrice with reduced abrasive properties  
IN Sklyar, Vasilij E.; Kozlyanina, Natalya P.; Tereshina, Tatyana P.;  
Makhlis, Grigorij L.; Tarasenko, Viktor A.; Gorshkova, Nina V.;  
Danilova, Aleksandra P.; Misyura, Nikolaj G.  
PA Od nii stomatologii, USSR; Krasnodarskaya parfyumerno-  
kosmeticheskaya fabrika  
SO U.S.S.R.  
From: Izobreteniya 1992, (30), 21-2.  
CODEN: URXXAF  
PI SU 1754104 A1 920815  
AI SU 89-4646675 890105  
DT Patent  
LA Russian  
AB A NaHCO<sub>3</sub> dentifrice contains a caries-inhibiting coating for teeth with reduced abrasive properties which is supplemented with preservative, finely \*\*\*ground\*\*\* \*\*\*eggshell\*\*\* and chalk. The dentifrice contains NaHCO<sub>3</sub> 35-45, starch 7-9, finely \*\*\*ground\*\*\* \*\*\*eggshell\*\*\* 7-9, ascorbic acid 0.4-0.8, nicotinic acid 0.09-0.15, thiamine bromide 0.01-0.05, preservatives 0.2-0.4, sweetening agents 0.2-2.0, aroms. 0.5-1.5 wt.% with the balance chalk.